

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An isolated DNA molecule comprising a DNA region containing a gene *doxA* encoding daunorubicin 14-hydroxylase and a DNA region ~~containing at least one gene conferring daunorubicin and doxorubicin resistance~~ containing *drrA* and *drrB* genes and optionally *drrC* gene, wherein said region containing said *drrA* and *drrB* genes is a 2.3 kb *XbaI-HindIII* DNA fragment.

2. (Currently Amended) The isolated DNA molecule according to claim 1, further comprising a strong promoter.

3. (Currently Amended) The isolated DNA molecule according to claim 2, wherein said strong promoter is *ermE**.

4. (Currently Amended) The isolated DNA molecule according to claim 1, wherein said gene region conferring daunorubicin and doxorubicin resistance is ~~selected from the group consisting of *drrA*, *drrB* and *drrC* genes and any mixtures thereof~~ contains *drrC* gene.

5. (Currently Amended) The isolated DNA molecule according to claim 4 1, wherein ~~said genes conferring daunorubicin and doxorubicin resistance are *drrA* and *drrB* genes~~ said region containing said gene *doxA* is 2.9 kb in length.

6. (Currently Amended) The isolated DNA molecule according to claim 4, wherein ~~said genes conferring daunorubicin and doxorubicin resistance are *drrA*, *drrB* and *drrC* genes~~ said region containing the gene *doxA* is a *KpnI-BamHI* DNA fragment.

7. (Currently Amended) The A plasmid containing an isolated DNA molecule according to claim 1, wherein ~~the region containing the gene *doxA* encoding~~

~~daunorubicin 14-hydroxylase is 2.9 kb in length~~ said plasmid is selected from the group consisting of pIS284 and pIS287.

8. (Currently Amended) ~~The isolated DNA molecule~~ A host cell transformed or transfected with a plasmid according to claim 7, wherein the fragment containing the gene ~~doxA~~ corresponds to the ~~KpnI-BamHI~~ fragment containing the ~~doxA~~ nucleotide sequence.

9. (Cancelled)

10. (Currently Amended) ~~The isolated DNA molecule~~ host cell according to claim 4 ~~8~~, wherein ~~said genes conferring daunorubicin and doxorubicin resistance are at least 80% identical to genes selected from the group consisting of drrA, drrB and drrC genes~~ said host cell is a bacterial cell which produces daunorubicin.

11. (Currently Amended) ~~A vector containing a DNA molecule~~ The recombinant host cell according to claim 4 ~~8~~, wherein said host cell is a Streptomyces cell.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) A process for bioconverting daunorubicin into doxorubicin, comprising the steps of:

culturing a recombinant host cell in a culture medium containing daunorubicin, wherein said host cell contains a an isolated DNA molecule comprising a DNA region containing a gene *doxA* encoding daunorubicin 14-hydroxylase and a DNA region ~~containing at least one gene~~ conferring daunorubicin and doxorubicin resistance containing *drrA* and *drrB* genes and optionally *drrC* gene, wherein said region containing said *drrA* and *drrB* genes is a 2.3 kb *XbaI-HindIII* DNA fragment, and, wherein said host cell does not produce daunorubicin, and

isolating any resulting doxorubicin from the culture medium.

19. (Currently Amended) A process for producing doxorubicin by fermentation comprising the steps of:

culturing a recombinant host cell in a culture medium, wherein said host cell contains a an isolated DNA molecule comprising a DNA region containing a gene *doxA* encoding daunorubicin 14-hydroxylase and a DNA region ~~containing one or more genes~~ conferring daunorubicin and doxorubicin resistance containing *drrA* and *drrB* genes and optionally *drrC* gene, wherein said region containing said *drrA* and *drrB* genes is a 2.3 kb *XbaI-HindIII* DNA fragment, and wherein said host cell is a bacterial cell which produces daunorubicin, and isolating any resulting doxorubicin from the culture medium.

20. (New) A plasmid containing an isolated DNA molecule according to claim 4, wherein said plasmid is selected from the group consisting of pIS284 and pIS287.

21. (New) The host cell according to claim 8, wherein said host cell does not produce daunorubicin.